

Notice of Allowability

Application No.

09/873,195

Examiner

Minh Dinh

Applicant(s)

FOSTER ET AL.

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to examiner's amendment authorized on 11/30/06.
2. ☒ The allowed claim(s) is/are 1-3,6-13 and 16-23.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mike Dryja on 12/06/06.

The application has been amended as follows:

1. (Amended) An apparatus that controls access to a job ticket, wherein the job ticket relates to a print job request to be executed by one or more processors coupled to a communications network, the apparatus comprising:

a work flow controller coupled to the communications network, wherein the work flow controller is capable of defining a work flow corresponding to the job request, and capable of defining the job ticket, and wherein the work flow comprises one or more branches;

a job ticket service that is capable of storing the job ticket and creating a job ticket reference, the job ticket service being further capable of providing the job ticket reference to multiple processors such that the multiple processors use the job ticket reference to access the stored job ticket instead of being provided with a copy of at least a portion of the job ticket, wherein the job ticket comprises a framework specifying the one or more branches, and wherein the job ticket service locks a branch when the branch is accessed by a processor[.];

an access key, wherein the access key is provided to the processor accessing the branch, and wherein the processor provides the access key to the job ticket service to unlock the locked branch; and

wherein the job ticket service comprises a key encryption system, and wherein the access key is encrypted using the key encryption system.

4. (Canceled)

5. (Canceled)

10. (Amended) A method for controlling access to a stored job ticket by locking branches of the job ticket, wherein the job ticket relates to a print job to be executed by one or more processors in an electronic network, the method comprising:

identifying a branch of the job ticket;

receiving a branch access request from a processor, the branch access request comprising a job ticket reference, the job ticket reference having been provided to the processor, instead of being provided with a copy of at least a portion of the stored job ticket, for accessing the stored job ticket;

retrieving the stored job ticket using the job ticket reference provided by the processor;

providing the processor with access to the branch; and

locking the branch[[]];

encrypting a key wherein the key controls modification access to the branch; and

providing the encrypted key to the processor.

Art Unit: 2132

14. (Canceled)

15. (Canceled)

17. (Amended) A method for controlling access to a stored job ticket, wherein a plurality of processors compete for selection to perform tasks related to the job ticket, said method comprising:

defining one or more tasks to complete the job ticket, wherein the job ticket relates to a print job and comprises a node-tree having a plurality of branches, and wherein each branch of the plurality of branches includes one or more defined tasks;

receiving a request from one or more of the plurality of processors to access one or more of the plurality of branches, each said request comprising a job ticket reference, the job ticket reference having been provided to the one or more of the plurality of processors, instead of being provided with a copy of at least a portion of the stored job ticket, for accessing the stored job ticket;

retrieving the stored job ticket using the job ticket reference provided by each of the one or more of the plurality of processors;

determining if a processor is currently accessing one or more of the plurality of branches;

for branches not being accessed, determining if the requesting one or more processors is authorized to access the branches;

for branches for which access is authorized, copying information from the branches to the authorized processors; and

locking the accessed branches[.];

for each locked branch, encrypting a key wherein the key controls modification access to the associated locked branch; and
providing the encrypted key to the processor authorized to access the associated locked branch.

21. (Amended) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for controlling access to a stored job ticket, the job ticket corresponding to a print job, wherein a plurality of processors compete for selection to perform tasks related to the job ticket, the method steps, comprising:

defining one or more tasks to complete the job ticket, wherein the job ticket comprises a node-tree having a plurality of branches, and wherein each branch of the plurality of branches includes one or more defined tasks;

receiving a request from one or more of the plurality of processors to access one or more of the plurality of branches, each said request comprising a job ticket reference, the job ticket reference having been provided to the one or more of the plurality of processors, instead of being provided with a copy of at least a portion of the stored job ticket, for accessing the stored job ticket;

retrieving the stored job ticket using the job ticket reference provided by each of the one or more of the plurality of processors;

determining if a processor is currently accessing one or more of the plurality of branches;

for branches not being accessed, determining if the requesting one or more processors is authorized to access the branches;

for branches for which access is authorized, copying information from the branches to the authorized processors; and

locking the accessed branches[[]];

for each locked branch, encrypting a key wherein the key controls modification access to the associated locked branch; and

providing the encrypted key to the processor authorized to access the associated locked branch.

2. The following is an examiner's statement of reasons for allowance.

The present invention is directed to a method and apparatus for controlling modification access to a work flow branch defined in a job ticket related to a print job request to be executed by one or more processors. More specifically, independent claims 1, 10, 17 and 21 identify the uniquely distinct features: providing the job ticket reference to multiple processors such that the multiple processors use the job ticket reference to access the stored job ticket instead of being provided with a copy of at least a portion of the job ticket; encrypting a key wherein the key controls modification access to the branch; and providing the encrypted key to the processor accessing the branch. The closest prior art include: (i) "JDF Specification Draft Spiral 4.0", which discloses controlling modification access to a work flow branch defined in a job ticket related to a print job request to be

executed by one or more processors; (ii) Bacon et al. (6,697,784), which discloses sharing a job ticket, in a workflow management system; and (iii) Silberschatz et al ("Operating System Concepts"), which discloses using an access key and encrypting sensitive information. However, "JDF Specification", Bacon, and Silberschatz, either alone or in combination, do not teach the specific features mentioned above. The prior art, taken either singly or in combination, fails to anticipate or fairly suggest the limitations of applicant's independent claim, in such a manner that a rejection under 35 U.S.C 102 or 103 would be proper. The claimed invention is therefore considered to be in condition for allowance as being novel and nonobvious over prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dinh whose telephone number is 571-272-3802. The examiner can normally be reached on Mon-Fri: 10:00am-6:30pm.

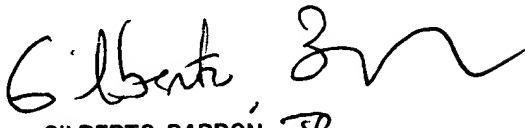
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MD

Minh Dinh
Examiner
Art Unit 2132

MD
12/06/06


GILBERTO BARRON JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100